

Prevalence and risk factors for pica during pregnancy in Tehran, Iran

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Abstract

Introduction and objectives Pica is an eating disorder characterized by the persistent ingestion of substances that the consumer does not define as food. The exact cause of pica is often unknown. The purpose of this study was to determine the prevalence of pica during pregnancy and its related risk factors.

Method This cross-sectional study was carried out in health care centers in west of Tehran. Three hundred women were selected by stratified sampling method from the population. Demographic information and characteristics of pica during pregnancy, such as the kind, the onset, duration, frequency and the reasons, and also iron supplementation status before and during pregnancy and kind of infant feeding were collected via interview and questionnaire. The data were analyzed by chi square test and logistic regression in SPSS 16.

Results The prevalence of pica among the studied population was 8.33 %, and pagophagia (ice and freezer frost) was the most common form of pica which is characterized by the ingestion of non-food substance (76 %). Sixty-four percent of women reported practicing pica regularly on a daily basis. In this study, there was significant association between pica practice and education, unwanted pregnancy, pregnancy complications, the levels of economic

satisfaction, iron supplementation during pregnancy, kind of infant feeding, and type of delivery. However, there was no significant association between pica and age, employment, pregnancy ranks, the history of abortions or stillbirths, infant sex, and iron supplementation before pregnancy.

Conclusions Iron supplementation during pregnancy should be more considered. Also women with low education should be asked concerning pregnancy pica.

Keywords Prevalence · Pica · Pagophagia · Pregnancy

Introduction

Most women during pregnancy experience disturbance in their normal eating patterns [1]. Pica is an eating disorder characterized by persistent ingestion of substances that the consumer does not define as food; it is a prevalent phenomenon that has been documented in nearly every culture [2, 3]. The most common forms of pica are Geophagia (the intake of clay or dirt) and Pagophagia (the intake of ice or freezer frost) [4]. Other reported pica substances include ashes, cigarette butts, soap, baking soda, baking powder, burnt match heads, hair, and pieces of papers, paint chips, charcoal, chalk, and coffee grounds. Pica is frequently observed in children, individuals with development disabilities, and pregnant women [5].

Displacement effect of non-food substances could result in reduce intake of nutritious foods leading to inadequate dietary intakes of essential nutrients [6].

An increase in parasitic infection, electrolyte disturbance, gastrointestinal complication, oral and dental injury, lead poisoning, and iron-deficiency anemia has been linked with pica [7–11]. Pica also has been associated with

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